DOCUMENT RESUME

ED 451 588 EA 030 905

AUTHOR Baker, Frederick J.
TITLE A Blueprint for the Future of Curricular Change in America's Public Schools.
PUB DATE 1999-11-00
NOTE 14p.
PUB TYPE Opinion Papers (120)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Curriculum Design; *Curriculum Development; Educational Administration; *Educational Environment; Educational Philosophy; Elementary Secondary Education; *Instruction; *Public Schools; School Culture

ABSTRACT

This article provides an overview of the short- and long-term action that is essential for effective curriculum improvement. It focuses on the ongoing need for schools to develop effective procedures for processing the routine operations of schools, to evaluate personnel, to maintain good salaries and working conditions, to involve staff in decision making, to experiment with new programs and question current educational practice, and to recognize that there are no gimmicks for solving problems. The paper offers a broad definition of curriculum, claiming that it encompasses all of a student's learning experiences in the school setting. Therefore, curriculum improvement should impart sound moral and spiritual values, develop physical fitness, teach basic knowledge, develop adaptability and critical intellectual inquiry, teach basic skills, teach technical skills, and develop a positive self-concept for the educational community. The text describes 10 obstacles to curriculum improvement, such as class scheduling and departmentalization. It also prescribes ways to overcome these obstacles, such as the formation of professional councils that are dedicated to curriculum improvement. The paper concludes with a synopsis of the impending changes in school administration, organization of professional staff, learning experiences, the school day and the school year, school buildings, and student conduct. (Contains 12 references.) (RJM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

A BLUEPRINT FOR THE FUTURE OF CURRICULAR CHANGE IN AMERICA'S PUBLIC SCHOOLS

Frederick J. Baker
College of Education and Integrative Studies
Cal Poly Pomona University

It is obvious to any perceptive observer of the American education scene, that programs and practices of most public schools have not kept pace with changes in our society. Some of us even suggest that the social problems being experienced, result from the inability of public education to prepare citizens to cope with life in the twentieth, let alone, twenty-first century. While little profit can be gained from any lengthy discourse attempting to fix blame for this lack of progress, it should be noted that educational change is almost always accompanied with controversy. A basic fear of the unknown and an instinctive precognition of the frustrations that can be expected from the introduction of change, serve as powerful deterrents to the dramatic improvement of public education. This is mentioned because if we are committed to a program of curriculum improvement, we must be prepared to face the difficulties associated with the changing of a bureaucratic social institution. While change does not always result in progress, there can be no progress without change. The major objective, therefore, is to support change that will result in progress while keeping controversy and frustration at a tolerable level. The accomplishment of this objective requires a comprehensive blueprint that outlines as succinctly as possible, the many phased attacks on the problem of educational improvement. This article represents such an initial step. It has been written for the purpose of giving an overview of the immediate and long range action essential in any program for curriculum improvement.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

F. Baker

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 451 588

Climate for Change

Grass won't grow in a desert, fish won't live on dry land, and curriculum growth will not take place in a sterile educational climate. Unless certain conditions prevail in a local educational environment, it will be a waste of time and effort to sow the seeds of curriculum improvement. Before considering the specifics of curriculum improvement, every effort must be made to establish and maintain the following conditions, which are essential for curriculum growth to flourish:

1. The continuous development of effective policies, procedures, and techniques for processing the routine operations of the school system.
2. Continuous evaluation of personnel based on a policy characterized by

EM 030905

BEST COPY AVAILABLE

scrupulous fairness.
3. The maintenance of good salaries and working conditions.
4. Involvement of staff in decision making.
5. Willingness to permit experimentation with new programs that have been well planned and have a rational basis.
6. Willingness to question every current educational practice on the basis of its relevancy in attaining its stated objectives.
7. Recognition that there are no gimmicks, panaceas, or pat formulas providing immediate and satisfactory solutions to educational problems.
8. Recognition that education is a profession (Lee, Smith, and Cro[illegible]er, 1995).

What Is A Curriculum?

A common educational misconception is to equate curriculum with the course of study or the course offerings at a school system. It is actually broader than this and involves many more aspects than a mere catalogue of classes.

Curriculum in its fullest sense covers all of the learning experiences of students in the school setting. This definition, of course, immediately erases the artificial distinction between "curricular" and "extra-curricular" activities. It acknowledges that valuable lessons are learned on the athletic field, passing between classes, and at student council meetings. Acceptance of the broad definition leads to the conclusion that curriculum improvement consists of a multi-phased attack in many different areas (Ornstein and Levine, 1996). To provide a better appreciation of what is involved in this process, the following general curriculum categories are identified:

1. Organization of Learning Experiences
This concerns class schedules, grade spans of individual schools, length of the school day and school year, time allotments for the various subjects, standards for promotion and failure, class sizes, and the deployment of instructional and supervisory personnel

2. Subject Matter Content
This category includes the various subject offerings of the school, the courses of study, the selection of resources and sequence and prerequisites that are required of graduation.

3. Methodology
This is the "how" of the curriculum and involves specifically the teaching process. It is primarily concerned with the presentation of content to facilitate the learning process and includes the whole area of instructional media; tapes/CD-ROM, TV, movies, maps, globes, use of drill: readiness concepts; discipline of pupils; conceptual teaching; simulation, and many other techniques.

4. Articulation
This is the fitting together of the component parts of the curriculum into a consistent whole. Although some authorities consider this a part of the organization of learning experiences, it is listed as a separate category because it literally cuts across the other categories and is an essential factor in providing continuity and consistency to all of the learning experiences in a school system. It should be noted that these classifications are not mutually exclusive and a consideration for the organization of learning experiences may also involve both methodology and content. For example, team teaching is primarily an

organizational matter but once teachers are organized into a team they are immediately faced with "how" to present material as a team rather than as individual teachers. When this happens, they are dealing with both content and methodology.

It must be recognized that concern with curriculum improvement will lead to the establishment of many different programs dealing directly and indirectly with all four of these major categories. As these programs become operative, they will raise many questions directed to the major objective of improving the total learning experiences for students (Wiles and Bondi, 1989).

What Should Curriculum Improvement Accomplish?

If the curriculum of a school is its learning experiences, then it is proper to ask what these learning experiences are supposed to accomplish. The answer to this question is deeply rooted in the cultural philosophy of our nation. Education is merely an instrument for the realization of the ideals and goals of the social order it serves and as such can not be isolated from the aspirations of that social order. The curriculum of a school system, therefore, must be consistent with the stated objectives of the society it serves, in our case, democracy.

The most profound implication of democracy is its concern for the inherent worth and dignity of each individual without regard to his/her wealth, race, creed, color, or national origin. Translated into an educational program, this can only mean that the American public schools exist to serve the total needs of a diverse population. In its broadest context the curriculum of the public schools should assist each individual learner to eventually realize his/her potential worth and dignity as a full participating adult citizen in the society (National Commission on Excellence in Education, 1983).

In more specific terms, the learning experiences of a school system should be directed toward:

1. Developing adaptability to a changing world.
2. Imparting sound moral and spiritual values.
3. Developing physical fitness.
4. Teaching of basic knowledge.
5. Developing skills and practice of critical intellectual inquiry.
6. Teaching of basic skills (3 R's).
7 Teaching technical skills needed by nations and/or developing areas.
8. Teaching values inherent in the American way of life, and
9. Developing positive self-concept and facility in good human relationships.

Curriculum improvement should be measured in terms of its accomplishment of these nine major goals for all of the learners who come to the schools for an education. While all of these goals may be accomplished satisfactorily by some students, and some of these goals may be accomplished satisfactorily by all of the students, a school system cannot be satisfied until all of these goals are realized as fully as possible by all of its clients.

Living in a social system that has achieved equality so far as decision making is concerned (the vote of the illiterate has the same value as the vote of the educated) it would be sheer stupidity to ignore the responsibility of educating each citizen to his/her full potential (United Way Strategic Institute, 1989).

Obstacles to Curriculum Improvement

Considerable empirical and research data exist substantiating the fact that the public schools are failing in meeting their major goal of assisting each individual pupil to realize his or her full potential worth and dignity as a participating citizen in a democratic society. Nationally nearly one out of every four pupils fails to graduate from high school. A casualty rate of 25% is a shameful enough statistic but even more alarming, is the fact that perhaps another 25% of the student body we do manage to graduate, for all practical purposes contribute and receive very little from their school experience (Los Angeles County Office of Education, 1994). If we would take a hard look at the participation of our students in extra-curricular activities I think we would be appalled at the huge number of students who did not participate in a single extra-curricular activity during four years of high school. Worse yet, I am sure we may find many of these students who stay in school but receive or contribute very little are responsible for the majority of the disciplinary problems and interfere seriously with the orderly education of other students who are genuinely interested in receiving a good education.

This is the school's responsibility. It cannot be delegated or wished away and as a consequence educators have no other alternative but to focus their energies toward providing a curriculum that will more adequately accommodate the needs, attitudes, interests and abilities of a diverse student population. This requires a program broad in scope, versatile in methods, and based on the obvious fact that pupils will vary in ability and motivation to learn.

Contrary to popular opinion, there exists a considerable body of objective knowledge about the learning process, which could provide us with significant clues in developing better programs and practices in the public schools. Unfortunately, for the most part, this knowledge is generally ignored and, like the chameleon, educators tend to adapt to the prevailing environment for personal protection rather than attack the conditions in the school setting that prevent better education (Hirsch, 1996).

These inhibiting conditions are well established and of long standing tradition, largely because they are convenient devices for dealing with students "en mass". However, by dealing almost exclusively with students in groups, educators have created a system that teaches for mediocrity. Courses of study, textbooks, and methodology are geared to group averages, which means that both the slow learner and the fast learner are usually neglected or ignored.

Following are ten major obstacles, which currently interfere with the development of a more individualized program of learning:

1. Class Scheduling
Rigid Scheduling of a series of classes of the same time duration that meet for the same number of periods each week, makes no provision for flexibility in assigning and reassigning pupils on the basis of their individual progress. This rigid time schedule for all areas of instruction also curtails flexibility in grouping students for either individual discussion, or lecture types of instruction.

2. Departmentalization
The classification of subjects in to specific departments, mutually exclusive, encourages a focus of interest on the specialties of one narrow area and discourages efforts to interrelate knowledge in a total approach to the learning process.

3. Instructional Materials
In most cases the textbook constitutes the major instructional tool. Under this condition, single texts adopted for each subject and grade constitute the course of study and pupils deviating from the grade norm often find themselves with no appropriate materials as a source of information or for personal study.

4. Pupil Evaluation
The present system of pupil evaluation with its reliance on the single letter grade or percentage mark is meaningless. The pupil who learns at a slower pace is forced to compete on even terms with the rapid learner. As a result the pupil of lesser academic ability is frequently discouraged while the quick learner suffers from a lack of challenge.

5. Subject Organization
There is a tendency to view education of a pyramid composed of subject blocks, each block designed to be placed in the structure at a specific time. Tenth grade students study world history, eleventh graders take United States history, and government is studied in the senior year. Because it is assumed students must all learn the same material at the same age, teachers organize their subjects in order to accommodate the largest number of any age group, those of supposed average ability and maturity. The result of such organization adjusted to the needs of pupils defined as average is that those labeled exceptional, those above or below the norm, are out of step with the ongoing program. The skillful pupil, forced to mark time, is never taxed to the extent of his/her ability. The immature pupil is forced to advance at a more rapid rate than his/her skills allow and becomes the slow learner and eventually the dropout.

6. Opportunity for Teacher Communication
There are very few existing formal structures, which facilitate the communications among teachers about common teaching problems or problem students. There is some intra-departmental communication but seldom inter-departmental communication. There is intra-school communication but very little inter-school communication. There is frequent communication among teachers who share common interests but infrequent communication between those with widely divergent interests. These conditions frequently interfere with a free exchange of information about individual pupil problems between those teachers who work with the same pupils during a week, semester or year.

7. Demands On Teacher Time
Typically a secondary school teacher is assigned five classes of approximately 25 to 30 students each for 55 minutes every day, five days a week. An elementary teacher will have a full class of 25 to 30 pupils for the entire day. Such arrangements limit the opportunities for teacher pupil counseling, attention to individual learning problems and assistance with the selection of appropriate materials because the bulk of the teacher's time is devoted to preparation, group instruction and evaluation.

8. Graded Structure
Advanced by Horace Mann and borrowed from a Prussian militaristic society more than 100 years ago the annual step by step system (graded structure) is based on the false assumption that every student learns at a comparable rate. The previous seven obstacles are all largely derived from this basic fallacy underlying the typical graded structure of the public school system and teacher efforts to deal more effectively with individual pupil differences are in a large measure frustrated by its rigidity.

For years, many sophisticated educational scholars have pointed out that the assignment of students to a series of grades based on chronological age with adapted subject matter makes it extremely difficulty to accommodate differences in student interest, maturity, ability and rate of learning. So common is this graded structure, however, it is virtually impossible for most educators and parents to view students in any other dimension. Student accounting reports, test scores, evaluation, promotion and failure are all so locked in with this concept that students are glibly referred to as being "above grade level", "up to grade level", or "below grade level". Those who do not measure up to the pre-determined grade standard at any given year, generally through no fault of their own, are labeled "slow", "retarded", or "stupid". Likewise, the student who is above grade level may be ignored in the belief that he or she has no problem. Erroneously, it is expected that all first graders must accomplish specific tasks just as it is anticipated that 12th graders possess certain proficiencies when they receive their diplomas. Actually, the only thing that students in a single grade may have in common is chronological age (Stiggins, 1994).

9. School Year
In recent years the length of the school year has been the subject of considerable discussion. Derived from an agrarian society, in which students were needed to work on the farm during the summer, the traditional 180-day school year is totally inadequate for an urban industrial society whose knowledge is doubling itself approximately every seven years.

10. Fragmentation of Effort
Rarely is there any overall coordination of educational effort directed toward the solution of a single major problem such as the integration of subject matter or the individualization of instruction. Within a school district curriculum improvement projects are frequently confined to separate departments and the major effort is concentrated in writing a study guide or course of study.

On the state and federal level during the past ten years there has been a proliferation of agencies and programs each designed to attack a particular narrow problem such as science and mathematics, preschool education, counseling, computer literacy, summer school, whole language, etc. While many of these programs have been worthwhile, there has been little coordination of effort so that some major emerging purpose governs all of their activities.

There has also been a scarcity of dialogue between public schools and the colleges and universities. Frequently these two major divisions of education work at cross-purposes and in isolation just as within the public schools there is a distinct cleavage between elementary, middle, and high school education. This lack of articulation at all levels of education is an obstacle of significant magnitude seriously interfering with the development of major improvements in curriculum (Sizer, 1992).

Organization for Curriculum Improvement

The previous sections of this article have dealt with background information that is essential to an understanding of specific curriculum improvement issues needed to be implemented in order to restructure the face of public education. This section will deal with the organizational structure needed to achieve this restructured model.

As much as possible, the focal point for curriculum improvement deals with the teacher in a classroom with a group of learners. In the administrative structure of public school, the school principal is designated as the major instructional supervisor of the school system. Only the principal, who works with teachers on a daily basis, has the opportunity to evaluate, and as a consequence, change educational practices for the better.

Principals, however, do not work in isolation and there is also need for consistent system-wide direction. The Superintendent, therefore, must be responsible and have as his/her major task, the obligation of providing system-wide consistency and direction for curriculum improvement. In a sense, the superintendent must excite, motivate, and stimulate the professional staff to seek better ways of performing their assignments, particularly in the area of classroom instruction. This cannot be accomplished through traditional line staff organizational concepts.

Building Professional Councils

The superintendent's responsibility in stimulating curriculum improvement must be shared with other administrators and classroom teachers. I would recommend, therefore, that a Professional Council be organized in each school district comprised of administrators, teachers, students, parents, school staff, community and business members. This Council should be delegated the responsibility with working with the Superintendent of Schools in accomplishing the following objectives:

1. Examine carefully the existing curriculum of their schools for the purposes of identifying its strengths and weaknesses.
2. Investigate curriculum of other school systems for the purpose of identifying innovative and promising practices.
3. Review and examine research dealing with curriculum improvement.
4. Review recommendations for the establishment of pilot curriculum programs in their schools.
5. Make specific recommendations to their Board of Education for instituting new programs in their schools.
6. Authorize ad hoc committees to investigate and implement new curriculum practices.

In retrospect, many of us in education are of the opinion that the most effective organizational structure for curriculum improvement was the old one room school. It was close to its clients, certainly oriented to individual pupil needs, entirely free from a strangling bureaucracy and hierarchy of bosses and, most important, primarily concerned with the real issues of education: the disciplines of language, numbers, and form. In spite of a thousand fold increase in per pupil

expenditures for education since the days of the one room school, it is highly questionable whether or not the overly organized and overly directed modern teacher is doing a better job than that poorly trained, miserably paid, under equipped, and badly housed teacher in the one room school of yesterday (Bateman, 1995).

No person in his or her right mind recommends that we return to the one room school, but I would suggest that the organization of curriculum improvement begins by transplanting some of the values, virtues and advantages of this former system of education into the overly organized modern school system.

This is accomplished through consistent decentralization into more manageable units but still held together through a system-wide planning organization such as the Professional Council.

In summary, curriculum improvement in public schools is envisioned as a grass roots involvement originating from individual teacher and/or school buildings under the direction of the building principal. Suggestions for these improvements will come about through prodding, needling and pressure of the Superintendent of Schools. Recommended changes in the program by an individual teacher and/or faculty should be presented to a professional Council for study and recommendation. Final implementation of any program will obviously be contingent upon approval of the Board of Education.

Getting Underway

The longest part of a journey is getting started and the most difficult aspect of accomplishing a significant task is to commence action leading to its accomplishment. Once underway, a progressive operation gathers momentum and generates its own enthusiasm, but until that first specific action is taken, there is constant and continuous "wheel spinning".

If, in American public schools, the proper climate can be maintained for curriculum improvement, if there is recognition of the comprehensives of the curriculum, if there is acceptance of the major instructional objectives as outlined in this article, if there is a determined effort to remove the obstacles that interfere with curriculum improvement, and if the organizational structure I have defined is fully implemented in spirit as well as on paper, then the major task of upgrading educational experiences for the student body can get underway.

At the very beginning, it must be accepted that change for improvement must be nurtured in a series of manageable pilot projects based on a sound rationale and designed to deal more effectively with individual pupil differences. Once these individual pilot programs demonstrate their effectiveness through actual practice, they can then be disseminated throughout the school system (Postman, 1995).

In beginning curriculum improvement there must be considerable inservice training for school principals and teachers to assist them in meeting the responsibilities of this new role of instructional leader. From these meetings should come a listing of possible directions for improving schools. An example of a listing generated for our "Americana School District" could be as follows:

In early September the Professional Council of our school district will begin a careful review of the following:

1. Teaming teachers
2. Instructional media
3. Globalizing the curriculum
4. Flexible grouping
5. Project based learning
6. Interdisciplinary instruction
7. Alternative educational programs
8. Bilingual/English language programs
9. Critical thinking programs
10. Reading across the curriculum
11. (Continue with your own appropriate list)

Whenever appropriate, members of the Professional Council would visit school systems in which certain of these innovative programs are operating. Sometime during the year it would be anticipated that the Professional Council would recommend the establishment of certain pilot programs in their schools in some of these areas that appear to hold promise for improvement. These recommendations should then be turned over to an Administrative Council and acceptable pilot programs would be assigned to individual schools or a group of teachers based on their enthusiasm and interest for a given project. Immediately the Principal should work with these groups and help with the specific and detailed planning so necessary for the establishment of these projects.

While this is taking place, individual schools, groups of teachers, and individual teaches should be urged to submit other proposals for investigation and study. For example, the Social Studies teachers might like to organize and American Studies Program. They could write up their proposal and submit it to the Professional Council. If approved, the teacher would then be permitted to bring in consultants from outside the system and proceed to work on this project with the objective of getting it into operation by the following September. In other words, action would be flowing from two directions. The Professional Council would be pushing for institution of certain programs it deems important while other groups would be urging the Professional Council to approve projects that are recognized as important at the building and classroom level. All of this activity would involve many classroom teacher and administrators. In no sense would there be specific mandates, but hopefully, there would be enthusiasm and eagerness to participate in significant innovations. Quite important in this activity would be sufficient publicity about these various projects so there would be cultivated among the staff and community an understanding of what is being planned. This is extremely important to counteract the general resistance to change that may be encountered when plans move into high gear.

Where Are American Schools Going?

Ultimately, of course, all of the engaged in should have some major purpose and meaning which raises the question of where our school districts are going if they begin a program of major curriculum improvement. There is no one with a crystal ball to predict with any degree of certainty what the content, methodology, and organization will be ten, or perhaps, even five years from now. However, on the basis of current information and identifiable trends we will probably be moving toward the following system of education:

1. Administration
Sometime in the future the common term's supervisor, superintendent, and principal will probably disappear. Already there is a trend away from the hierarchical structure of bosses in public education and this trend will quite likely accelerate in the immediate future. Administration in the next few years will become more synonymous with facilitation and will be subservient to, rather than master of, the teaching process. Possibly there will be a team of administrators assigned to a particular area or educational unit, each with a specialty such as computer/Internet-based instruction, internationalizing education, special services, etc. This team will be lead by a chair who will coordinate the group efforts. Administrative activity will be determined by the planning of the total professional staff and will be directed toward facilitating the teaching process.

2. Organization of the Professional Staff
There is a strong possibility that the professional staff will undergo a complete change during the next few years with considerable more specialization based on activity rather than subject area. With the development of the Internet, the teacher will cease to be a communicator of information and knowledge and will become like today's physician, a diagnostician. This will result in the establishment of many new professional classifications with the teacher emerging at the top of the professional pyramid. Beneath the teacher will be various levels of professionals and para-professionals. For example, one group of specialists could work exclusively with evaluation of individual pupil progress. This evaluation, however, will not be subjective as it is today but will be statistical and related directly to individual expectations. Each students progress could be checked daily by computer against what he/she could be reasonably expected to accomplish in each subject area. The later would be determined through new instruments of testing which would give a precise measurement of the student's full inventory of abilities. With the transmission of knowledge and skills reduced to scientific accuracy and largely handled by technicians and programmers, teachers will work with students in groups and individuals with the major purpose of developing concepts and attitudes. Freed from the routine of current teaching, the teacher of the future will devote his/her time to the creative aspects of producing the self-reliant participating individual who will be able to realize his/her full potential in the adult society.

3. Organization of the Learning Experience
The full development of programmed and computerized instruction, distance learning, Internet usage, etc., will permit the organization of learning experiences to become individualized and tailored to the exclusive needs of each student. Gone will be the graded courses of study, rigid class schedules, group textbooks, standardized assignments, and annual promotions. Students will begin their school experiences probably at the ages of 3 or 4. Initially they will be assigned in groups of about fifteen to a self-contained classroom with one teacher and an aide. Activities in this group will be similar to current Head Start and kindergarten programs. The major difference will be the movement from this group to a new experience. Pupils will move into a regular program on an individual basis when after careful observation and study, it is determined they are ready for formal academic learning.

Instruction in basic skills will be programmed by computer. Each pupil will be assigned a program of studies based on his/her unique abilities and will move

through this experience at his/her own rate of speed to which the computer will adjust. A part of each day's experience will also be in group activities supervised by a master teacher and dealing with the development of concepts, attitudes and self images. During these early years each student's special talent will be identified and additional learning experiences will be provided on an individual basis in these special areas of talent. As the student moves though the school, these experiences will increase so that when he/she reaches the secondary level approximately half of his/her time will be spent in their special talent field.

4. School Day and School Year
The traditional 180 day school year will disappear sometime in the future. Very soon all teachers will be placed on twelve month contracts with an appropriate vacation period. There will be a gradual merging of regular and summer school activities so that eventually year around school will be a reality for all. This does not mean that all students will attend school 360 days a year. The school year for students will vary on an individual basis. Vacation periods will also be individualized and taken at the mutual convenience of the school and family. Possibly vacation experiences will be incorporated in the school's learning experience. The school day will also be different for individual students. Teachers and other professionals will report on staggered times and various shifts. Likewise students will attend school on staggered and overlapping shifts based on their individual progress and essential needs. It is also probable that the school week will be extended to include Saturday with some teachers on duty Monday through Friday, others on duty Tuesday through Saturday. All of this will lead to a much more efficient utilization of both time and the school plant. School plants like industrial plants need to be used 24 hours a day, 365 days a year.

5. Student Conduct
Disciplinary problems as we currently know them will disappear in the school of tomorrow. By being more organized in transmitting knowledge and developing skills while providing skilled teachers dedicated solely to encouraging character development, democratic attitudes, and positive self-images, education will become significant and exciting to students. As a consequence there will be no reason for students to cause trouble or misbehave. Considerable self-discipline and personal responsibility will characterize student conduct in school. They will be involved in experiences matched to their rate of learning and individual interests and will be given considerable latitude in setting their work pace.

6. School Buildings
Schools of the future will be replaced with learning centers located on a minimum tract of fifty acres and housing upwards of 3000 students. Individual egg crate rooms will be replaced in these new learning centers with flexible walls and rooms for many different sizes and shapes, each designed for special programs. Other areas will include gymnasiums, auditoriums, laboratories, cafeterias, computer areas, lecture halls, study areas, solariums, art and music studios, resource centers, and recreation rooms. There will also be open areas designated for many outdoor activities.

7. Assignment of Students
Students will be assigned to educational houses with approximately 100 members. This educational family will be supervised by a team of six master teachers each with a major specialty who will work with all of these students, individually, and in groups, for extended blocks of time. Educational experiences

will be designed for students from 3 to 21 years of age and covering the equivalent of nursery school through the second year of college. Students will move through their experiences at their own rate of speed, some finishing in perhaps as little as ten years and others staying for the full eighteen years. Instead of annual promotions, students will move between educational families any time their progress indicates they are ready for a more advanced learning climate.

Summary:

Briefly, then, this is the kind of educational system that may emerge sometime in the future. Many of us will never live to see all of these things take place because their establishment will be an evolutionary process directly related to the capacity and willingness of both the lay public and professional staff to accept change. Theoretically all of these possibilities could become a reality within five years assuming there was a willingness to provide the tremendous outlay of money required to make the transformation along with the readiness to accept radical change. We halve the technical knowledge and capability today to make the change tomorrow.

Unfortunately this will not happen. Just as there was a slow stead evolution in the automobile from the Model T to the Miata, so there will be slow but, hopefully, steady evolution in educational improvement. We can, however, hasten this process by creating the kind of educational climate that encourages the development of programs pointing in this general direction

In accepting this particular blueprint for curriculum improvement, there must be a concurrent acceptance of the possibility of exploring some of the "nonsense" in education. This term "nonsense" comes from our colleagues in quantum physics where there are elements that people have neglected because of their seeming irrelevance to the problems at hand. We have to research these areas of "nonsense' to find solutions to many of our unanswered questions. Some programs will prove to be ineffective and will have to be abandoned. Generally, however, the institution of programs should be determined largely on how they correlate with this suggested educational system of the immediate future. As each program is refined in a well organized pilot project, it can be used as a spearhead to move us in the general direction of a new educational system. (Miller, 1996).

This, then, is a blueprint for curriculum improvement in America's schools. Even though much of this material is general in nature, it contains the rationale, the steps; the methods, the goals and the techniques for improving the educational experiences of our public school students. This should be the major concern of every school district, and eventually, whether we like it or not, the community and the professional staff will force us to give it a number one priority. The need for change is now. As Margaret Mead once stated:

> "We are now at the point where we must educate people in what nobody knew yesterday and prepare our schools for what no one knows yet, but what some people must know tomorrow".

References

Bateman, V., "Some Thoughts on Interdisciplinary Education," *OPEN MIC, A Journal of the California Subject Matter Projects* (Spring, 1995).

Hirsch, Jr., E.D., *The Schools We Need.* (New York: Doubleday, 1996).

Lee, V, Smith, J., and Croninger, R., "Another Look at High School Restructuring," *Issues in Restructuring Schools* (Center on Organization and Restructuring of Schools: Issue Report No. 9, Fall, 1995).

Los Angeles County Office of Education, "The Condition of Public Education in Los Angeles County, 1994." (Los Angeles, 1994).

Miller, R., "Reform Versus Transformation," *Great Ideas in Education* (Brandon, Vermont: Number Eight, Spring, 1996).

National Commission on Excellence on Education, "A Nation at Risk: The Imperative for Educational Reform," (U.S. Government Printing Office, April 1983).

Ornstein, A. and Levine, D., *Foundations of Education, Sixth Edition* (Boston: Houghton Mifflin Co. 1996).

Postman, N., *The End of Education, Redefining the Value of School* (New York: Alfred A. Knopf,1995).

Sizer, Theodore, *Horace's School, Redesigning the American High School,"* (Boston: Houghton Mifflin Co. 1992).

Stiggins, Richard J. *Student Centered Classroom Assessment* (New York: Merril-Macmillan, 1994).

United Way Strategic Institute, "Nine Forces Reshaping America," *World Future Society* (Bethesda, Maryland, 1989).

Wiles, Jon and Bondi, Joseph C. *Curriculum Development: A Guide to Practice* (Columbus: Charles E. Merrill Publishing, 1989).